WHAT IS CLAIMED IS:

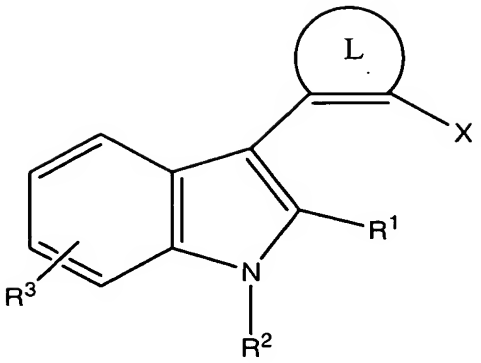
1. An optical recording material comprising a side-chain polymer liquid crystal which contains an electrocyclic-reaction-type photochromic compound.

2. An optical recording material comprising a side-chain type polymer liquid crystal having a polymer chain, said polymer chain containing therein a monomeric unit to which an electrocyclic-reaction-type photochromic compound is bonded.

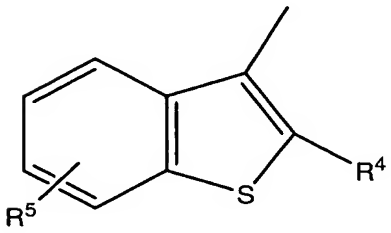
3. The optical recording material according to Claim 1, wherein said electrocyclic-reaction-type photochromic compound is a photochromic diarylethene compound (A).

4. The optical recording material according to Claim 2, wherein said monomeric unit to which said photochromic compound is bonded is a monomeric unit which is a polymerized photochromic diarylethene compound (A-1) having a polymerizable group.

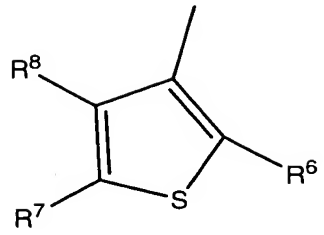
5. The optical recording material according to Claim 3, wherein said photochromic diarylethene compound (A) and said photochromic diarylethene compound (A-1) are a compound represented by the following formula (1), [provided that said photochromic diarylethene compound (A-1) has a polymerizable unsaturated group]



(1)



(a)



(b)

wherein X in the formula (1) represents the above formula (a) or formula (b), provided that R^1, R^4, and R^6 each independently represent an alkyl group which may have a substituent, or an alkoxy group which may have a substituent, R^2 represents a hydrogen atom, an alkyl group which may have a substituent, an alkoxy group which may have a substituent, or an organic group containing a monovalent polymerizable unsaturated group, R^3 and R^5 each independently represent a hydrogen atom, a cyano group, a nitro group, an alkyl group which may have a substituent, an alkoxy group which may have a substituent, a monovalent aromatic ring which may have a substituent, or an organic group containing a monovalent polymerizable unsaturated group, R^7 represents a monovalent aromatic ring group which may have a substituent, R^8 represents a

hydrogen atom, an alkyl group which may have a substituent, or an alkoxy group which may have a substituent, and ring L represents a carbon ring or a heterocyclic ring.

6. An optical recording body comprising said optical recording medium as defined in Claim 1, which is subjected to uniaxial orientation processing.

7. An optical recording medium comprising a recording layer which comprises a thin layer of said optical recording material as defined in Claim 1, which is subjected to uniaxial orientation processing.

8. An optical recording method characterized in that an information signal is recorded on an optical recording material by irradiating a thin film of said optical recording material as defined in Claim 1, which is subjected to uniaxial orientation processing, with an information signal which comprises a light with a wavelength which is capable of changing the structure of a photochromic compound at a temperature near a clearing point (Tc) of a side-chain type polymer liquid crystal, thereby changing the molecular orientation of said side-chain type polymer liquid crystal.

9. An optical recording method characterized in that an information signal is recorded on an optical recording material by irradiating said recording layer of said optical recording medium as defined in Claim 7, with an information signal which comprises a light with a

wavelength which is capable of changing the structure of a photochromic compound at a temperature near a clearing point (Tc) of a side-chain type polymer liquid crystal, thereby changing the molecular orientation of said side-chain type polymer liquid crystal.

10. A reading method for reading an information signal recorded on an optical recording material by said optical recording method as defined in Claim 8 by reading out as a modulation of polarized light of an incident light a change in the double refraction caused by a change in the molecular orientation in a side-chain type polymer liquid crystal at a temperature less than a glass transition temperature (Tg) of said side-chain type polymer liquid crystal.

11. A method of recording/reading information characterized by irradiating a thin layer of said optical recording material as defined in Claim 1, which is subjected to uniaxial orientation processing, with an information signal which comprises a light with a wavelength which is capable of changing the structure of a photochromic compound at a temperature near a clearing point (Tc) of a side-chain type polymer liquid crystal, thereby recording information and nondestructively reading out the information recorded by irradiating light with an arbitrary wavelength at a temperature less than a glass transition temperature (Tg) of said side-chain type polymer liquid crystal.

12. A method of recording/reading information characterized by irradiating a thin layer of said optical recording material as defined in Claim 1, which is subjected to uniaxial orientation processing, with an information signal which comprises a light with a wavelength which is capable of changing the structure of a photochromic compound at a temperature near a clearing point (Tc) of a side-chain type polymer liquid crystal, thereby recording information, and nondestructively reading out said recorded information by irradiating with light with the wavelength used in said recording at a temperature less than a glass transition temperature (Tg) of said side-chain type polymer liquid crystal.

13. The method of recording/reading according to Claim 11, wherein the clearing point (Tc) of said side-chain type polymer liquid crystal is 70°C or above, and the glass transition temperature (Tg) of said side-chain type polymer liquid crystal is 50°C or less.